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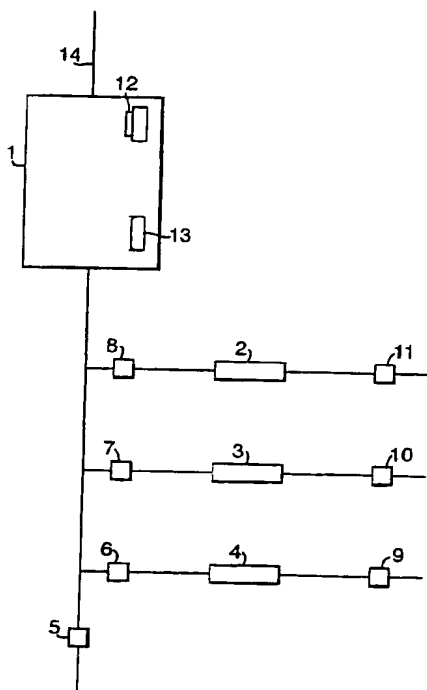
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(54) Title: NEW METHODS OF FABRICATING DEVICES AND SEMICONDUCTOR LAYERS COMPRISING CADMIUM MERCURY TELLURIDE, MERCURY TELLURIDE, AND CADMIUM TELLURIDE



(57) Abstract: The invention relates to a method of depositing  $Hg_{1-x}Cd_xTe$  onto a substrate, in a MOVPE technique, where  $0 \leq x \leq 1$ ; comprising the step of reacting together a volatile organotellurium compound, and one or both of (i) a volatile organocadmium compound and (ii) mercury vapour; characterised in that the organotellurium compound is isopropylallyltelluride. The invention also relates to devices, such as infrared sensors and solar cells, that comprise  $Hg_{1-x}Cd_xTe$  materials.

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